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JOINT CHIEFS OF STAFF

MEMORANDUM OF POLICY NO. 178
(Issued 17 March 1975)
(2d Revision 4 September 1986)

MILITARY SATELLITE COMMUNICATIONS SYSTEMS

VOLUME I. POLICY, OBJECTIVES, RESPONSIBILITIES, AND PROCEDURES

1. Pursuant to approval by the Joint Chiefs of Staff on 4 September 1986, the Enclosure is circulated as JCS MOP 178, Volume I (2d Revision).
2. This memorandum of policy supersedes JCS MOP 178 (1st Revision), 1 May 1978.
3. Copies of this MOP are being sent to the Secretary of Defense; CINCPAC; USCINCLANT; USCINCCENT; USCINCEUR; CINCPAC; USCINCPAC; USCINCKED; USCINCSO; USCINCSpace; CINCSAC; Directors, ECA, DLA, DMA, DNA, NSA, DIA, and JTC3A; Chief, ANMCC; and Secretary, Military Communications-Electronics Board.
4. Summary of Changes. This revision:
 - a. Redefines management responsibilities for executive agents and MILSATCOM system managers (paragraphs 10 and 11).
 - b. Adds responsibilities for the CINCs (paragraphs 12 and 13).

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- c. Defines the roles of the Joint Communications Satellite Center and Joint Tactical Command, Control, and Communications Agency (paragraphs 14 and 15).
- d. Establishes the requirement for a System Control and Operations Concept (paragraph 18).
- e. Establishes procedures for validation of user requirements (paragraph 20).
- f. Provides guidance for prioritizing requirements and allocations of MILSATCOM capacity (paragraph 21).

Joint Secretariat

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JCS MEMORANDUM OF POLICY	<u>2</u>
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MILITARY SATELLITE COMMUNICATIONS SYSTEMS	<u>4</u>
VOLUME I. POLICY, OBJECTIVES, RESPONSIBILITIES, AND PROCEDURES	<u>5</u>
SECTION I. INTRODUCTION	<u>6</u>
1. <u>Purpose</u> . To issue the policy of the Joint Chiefs of Staff	<u>7</u>
for US military satellite communications (MILSATCOM) systems.	<u>8</u>
2. <u>References</u> . See Appendix A.	<u>9</u>
3. <u>Applicability</u> . This MOP provides direction to the Services,	<u>10</u>
unified and specified commands, and Defense agencies that are	<u>11</u>
responsive to the Joint Chiefs of Staff. These activities are	<u>12</u>
referred to as MILSATCOM users. In addition, procedural	<u>13</u>
provisions of this MOP apply to all other users of MILSATCOM	<u>14</u>
systems.	<u>15</u>
4. <u>Scope</u> . This MOP concerns:	<u>16</u>
a. Overall MILSATCOM policy and objectives.	<u>17</u>
b. Responsibilities of the Joint Chiefs of Staff.	<u>18</u>
c. Responsibilities of executive agents and MILSATCOM system	<u>19</u>
managers.	<u>20</u>
	<u>21</u>
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d. Responsibilities and functions of the MILSATCOM Systems Architect.	<u>1</u> <u>2</u>
e. Responsibilities of the CINCs.	<u>3</u>
f. Responsibilities of the JCSC.	<u>4</u>
g. Responsibilities of the JTC3A.	<u>5</u>
h. Policy and procedures relative to:	<u>6</u>
(1) MILSATCOM systems planning.	<u>7</u>
(2) MILSATCOM system concept of operations and control.	<u>8</u>
(3) Use of MILSATCOM systems by non-DOD users.	<u>9</u>
(4) Processing of user requirements for MILSATCOM systems.	<u>10</u> <u>11</u>
(5) Prioritization of requirements.	<u>12</u>
(6) Allocation of MILSATCOM system capacity.	<u>13</u>
5. <u>Definitions.</u> The terms used in this MOP are either as defined in JCS Pub 1 or as defined in Appendix C. Appendix C also contains a glossary of abbreviations.	<u>14</u> <u>15</u> <u>16</u>
6. <u>Overview.</u> MILSATCOM systems are a collective resource of the Department of Defense, managed and operated by DOD elements. DOD MILSATCOM systems support communications considered vital to national interests and to the security of the United States and its allies. These systems must be managed, controlled, and operated to ensure the maximum	<u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u>

effective use of MILSATCOM system resources to support critical C3I requirements vital to national interests and operational missions specified by the Joint Chiefs of Staff. These systems will be required to operate during peace and through times of crisis, contingency, and general war. The dynamic nature of these communications requires extremely flexible satellite communications systems. Achieving this flexibility demands common management and control systems and configuration standards in order to ensure that the integrity of the systems is maintained under all conditions.

a. Fundamental Architecture. MILSATCOM systems have three primary segments: the earth terminal segment, which includes all earth terminals and related communications interface equipment; the space segment, which includes all active and spare orbiting satellites with their associated communications payloads; and the control segment, which includes earth terminal segment control and space segment control. The ability of MILSATCOM systems to support users depends heavily on the control segment. All three segments must operate together, simultaneously adapting to changing demands during all situations, or the integrity of the system and the support of its users will be at risk.

b. MILSATCOM System Technology. Significant advances in 1
MILSATCOM system hardware employing features such as 2
multiple-beam antennas, onboard signal processing, and 3
spread-spectrum communications are adding new capabilities 4
as well as increasing the demands on operational management 5
and control systems. These highly complex systems require 6
exceptional management from the national level to the 7
individual users. This MOP reflects the top-level opera- 8
tional policy governing all MILSATCOM systems. 9

SECTION II. BASIC POLICY AND OBJECTIVES 10

7. Basic Policy. The policy for use of MILSATCOM systems is as 11
follows: 12

- a. The space and control segments of all MILSATCOM systems 13
must be operationally controlled as joint assets to satisfy 14
validated requirements in accordance with the priority 15
structure approved by the Joint Chiefs of Staff. 16
- b. Interoperability must be considered in system planning 17
and design. 18
- c. Survivability and endurance must be considered in system 19
planning and design. 20
- d. Operational planning for MILSATCOM systems will be 21
integrated into the deliberate planning process to ensure 22

the development of realistic and executable operational	<u>1</u>
plans.	<u>2</u>
e. Priorities of access requests for MILSATCOM will be based	<u>3</u>
on the criteria in paragraph 21 below.	<u>4</u>
f. Allocation of MILSATCOM capacity will be based on the	<u>5</u>
priorities assigned and on the current operational	<u>6</u>
situation.	<u>7</u>
g. MILSATCOM operational management and control subsystems	<u>8</u>
will be standardized to the maximum extent possible.	<u>9</u>
3. <u>Objectives.</u> JCS objectives for MILSATCOM systems are to:	<u>10</u>
a. Develop and maintain a joint MILSATCOM system	<u>11</u>
architecture.	<u>12</u>
b. Establish a joint approach to planning, acquisition, and	<u>13</u>
use of all MILSATCOM systems.	<u>14</u>
c. Acquire, on a timely, coordinated, and economical basis,	<u>15</u>
operational capabilities to satisfy validated requirements.	<u>16</u>
d. Develop flexible operational capabilities that provide	<u>17</u>
for interoperability and will be as survivable as the	<u>18</u>
missions supported.	<u>19</u>
e. Use MILSATCOM system resources effectively, based on the	<u>20</u>
operational priorities of individual communications	<u>21</u>
requirements.	<u>22</u>

f. Develop responsive MILSATCOM management and control systems.

SECTION III. RESPONSIBILITIES

9. Joint Chiefs of Staff. The Joint Chiefs of Staff will:
- a. Specify responsibilities and the scope of authority for executive agents and system managers of MILSATCOM systems.
 - b. Establish policy, guidelines, and procedures for the use of all MILSATCOM systems.
 - c. Review and validate all MILSATCOM requirements.
 - d. Review and recommend appropriate action to the Secretary of Defense on any agreement or arrangement for shared use of MILSATCOM system assets and services by non-DOD agencies.
 - e. Review and submit recommendations to the Secretary of Defense on any proposed cooperative agreement or arrangement between the Department of Defense and an allied government or agency for shared use of MILSATCOM system assets and services, in accordance with JCS MOP 112.
 - f. Approve procedures for the allocation of MILSATCOM capacity.

- g. Resolve differences among Services, Defense agencies, and other users of MILSATCOM systems with respect to responsibilities, functions, allocation of satellite capacity, control, validation, and prioritization of user requirements.
- h. Provide allocation planning guidance for use of MILSATCOM resources to:
- (1) Unified and specified commands in support of JCS-directed OPLANs and missions.
 - (2) Services, Defense agencies, and non-DOD users in support of national defense requirements.
- i. Direct the reallocation of MILSATCOM resources to satisfy national defense goals through all levels of conflict.
- j. Staff and operate the JCSC.
- k. Validate the SCOC for MILSATCOM systems.
- l. Establish overall goals and long-term MILSATCOM system plans.
- m. Ensure that the theater CINCs have reviewed and support all requirements that have significant implications for theater warfighting capabilities.
10. Executive Agents
- a. The Chiefs of the Services, as members of the Joint Chiefs of Staff, are appointed by the Secretary of Defense

as executive agents for specific MILSATCOM systems or	<u>1</u>
segments. Executive agent responsibilities include:	<u>2</u>
(1) Ensuring system acquisition.	<u>3</u>
(2) Management of funds.	<u>4</u>
(3) Representing the designated system or program in the	<u>5</u>
planning, programming, and budgeting process.	<u>6</u>
b. Designated executive agents for MILSATCOM space segments	<u>7</u>
are:	<u>8</u>
(1) FLTSATCOM, including GAPPILLER, FLTSAT, LEASAT, FEP,	<u>9</u>
and UHF Follow-on Satellite--Chief of Naval Operations.	<u>10</u>
(2) AFSATCOM--Chief of Staff, US Air Force.	<u>11</u>
(3) LES--Chief of Staff, US Air Force.	<u>12</u>
(4) MILSTAR--Chief of Staff, US Air Force.	<u>13</u>
(5) DSCS--Chief of Staff, US Air Force.	<u>14</u>
(6) SLC--Chief of Naval Operations.	<u>15</u>
c. Designated executive agents for MILSATCOM network	<u>16</u>
control segments are:	<u>17</u>
(1) FLTSATCOM, including GAPPILLER, FLTSAT, LEASAT, FEP,	<u>18</u>
and UHF Follow-on Satellite--Chief of Naval Operations.	<u>19</u>
(2) AFSATCOM--Chief of Staff, US Air Force.	<u>20</u>
(3) LES--Chief of Staff, US Air Force.	<u>21</u>
(4) MILSTAR--Chief of Staff, US Air Force.	<u>22</u>

(5) DSCS--Chief of Staff, US Army, or Chief of Staff, US	<u>1</u>
Air Force.	<u>2</u>
(6) SLC--Chief of Naval Operations.	<u>3</u>
d. Designated executive agents for the MILSATCOM earth	<u>4</u>
terminal segments are:	<u>5</u>
(1) Ground--Chief of Staff, US Army.	<u>6</u>
(2) Airborne--Chief of Staff, US Air Force.	<u>7</u>
(3) Shipborne, submarine, or naval aircraft--Chief of	<u>8</u>
Naval Operations.	<u>9</u>
11. <u>MILSATCOM System Managers</u>	<u>10</u>
a. Each MILSATCOM system manager is responsible for:	<u>11</u>
(1) System-level operation planning and program	<u>12</u>
management.	<u>13</u>
(2) Engineering development and design of the system to	<u>14</u>
ensure that it satisfies validated operational	<u>15</u>
requirements in the presence of projected threat.	<u>16</u>
(3) Incorporating interoperability requirements into	<u>17</u>
system planning and design.	<u>18</u>
(4) Developing the SCOC for JCS approval.	<u>19</u>
(5) Taking all appropriate actions to ensure that the	<u>20</u>
system meets its operational objectives.	<u>21</u>
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- (6) Developing facilities, as appropriate, and
procedures to allocate the system's communications
capacity to satisfy validated operational requirements
through all levels of conflict. Such allocation
procedures will be in accordance with priorities in
Appendix B and will be approved by the Joint Chiefs of
Staff.
- (7) Maintaining a data base of active users of the
system.
- (8) Providing information on system use and status to
the JCSC.
- (9) Identifying configuration standards (a) for the
earth terminal segment, (b) for the communications
control segment, and (c) in conjunction with
USCINCSpace, for the satellite payload control segment
required for operations. Advising appropriate agencies
or elements of the actions necessary to ensure that all
subsystems under development or involved in current
operations conform to these standards.
- (10) Developing and maintaining (a) operational network
management procedures, (b) communications control system
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procedures, and (c) in conjunction with USCINCSpace,	<u>1</u>
satellite payload control system procedures.	<u>2</u>
(11) Performing engineering analyses and other studies	<u>3</u>
of system performance, as requested by the Joint Chiefs	<u>4</u>
of Staff.	<u>5</u>
(12) Establishing and maintaining a 5-year program plan	<u>6</u>
for the system based on the overall MILSATCOM system	<u>7</u>
architecture established by the MSO, on validated user	<u>8</u>
requirements, and on available funding.	<u>9</u>
(13) Advising the executive agents on programmatic,	<u>10</u>
technical, and operational matters necessary to optimize	<u>11</u>
the expenditure of fiscal resources.	<u>12</u>
(14) Providing the executive agents with prioritized	<u>13</u>
lists of efforts required to assist them in developing	<u>14</u>
the POM.	<u>15</u>
(15) Advising the Joint Chiefs of Staff on the	<u>16</u>
operational effects of POM decisions.	<u>17</u>
(16) Developing integration, transition, and implementa-	<u>18</u>
tion plans for all segments (space, ground, and control)	<u>19</u>
of the system.	<u>20</u>
(17) Developing procedures to integrate planning for the	<u>21</u>
system into the deliberate planning process.	<u>22</u>

(18) Assessing the technical feasibility of user requirements forwarded by the M30.	<u>1</u> <u>2</u>
b. Designated system managers for MILSATCOM systems are:	<u>3</u>
(1) FLTSATCOM, including GAPFILLER, FLTSAT, LEASAT, and FEP--Chief of Naval Operations.	<u>4</u> <u>5</u>
(2) UHF Follow-on Satellite--To be determined by validated concept of operations.	<u>6</u> <u>7</u>
(3) AFSATCOM--Chief of Staff, US Air Force.	<u>8</u>
(4) LES--Chief of Staff, US Air Force.	<u>9</u>
(5) MILSTAR--Chief of Staff, US Air Force.	<u>10</u>
(6) DSCS--Director, DCA.	<u>11</u>
(7) SLC--Chief of Naval Operations.	<u>12</u>
12. <u>CINCS.</u> The CINCS will:	<u>13</u>
a. Conduct an annual review of each major war and contingency plan to determine its critical MILSATCOM requirements.	<u>14</u> <u>15</u> <u>16</u>
b. Ensure that JCS-directed OPLANS and missions can be accomplished within the capacity allocated by the Joint Chiefs of Staff.	<u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u>

- c. Provide operational direction for JCS-allocated capacity, including (1) establishing access priorities, (2) adjudicating theater-unique conflicts, and (3) advocating additional allocation requirements to the Joint Chiefs of Staff.
 - d. Direct the use of JCS-allocated MILSATCOM resources for the GMF.
 - e. Provide annual training requirements, with quarterly updates, to the appropriate MILSATCOM system manager.
13. USCINCSpace. In addition to applicable CINC responsibilities listed above, USCINCSpace is responsible for space control and space support in accordance with SM-94-85 and SM-700-85. These functions include:
- a. Planning for and executing the health, status, and survivability aspects of the space segment.
 - b. Planning for and executing tracking, station keeping, and ephemeris generation.
 - c. Executing communications payload commands at the direction of the Joint Chiefs of Staff through the appropriate system manager as defined in this MOP.

14. Joint Communications Satellite Center. JCSC will:
- a. Be the DOD focal point for monitoring, coordinating, and formulating actions requiring JCS approval for all MILSATCOM tactical and contingency operational access.
 - b. Resolve day-to-day conflicts in resource allocation and implement JCS direction for all matters relating to allocation of MILSATCOM resources in support of tactical requirements (including exercise requirements) and contingency operations.
 - c. Assist the system managers in enforcing the JCS MILSATCOM priority system.
 - d. Validate and direct high-priority accesses for non-continuous requests involving missions of short duration. Other MILSATCOM accesses will be based only on previously approved and validated requirements.
 - e. Assist users in gaining satellite access in emergency situations when time precludes normal procedures. Assign an officer to process emergency MILSATCOM satellite access requests during non-duty hours.
 - f. Monitor MILSATCOM access to ensure effective and efficient use of MILSATCOM capacity.

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- g. Know the current operational status of all MILSATCOM systems. 1
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- h. Be the DOD focal point for apportionment of MILSATCOM capacity in support of exercises, contingencies, crises, and war. 3
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15. Joint Tactical Command, Control, and Communications Agency. 6
- JTC3A, under DOD Directive 5154.28, is responsible for ensuring interoperability of tactical C3 systems for joint or combined operations, including nonstrategic nuclear forces, through the development and maintenance of a joint architecture, interface standards, and interface definitions for tactical and mobile C3 systems. JTC3A will collaborate with individual executive agents and MILSATCOM system managers in all uses of MILSATCOM that have joint tactical applications. JTC3A will: 7
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- a. Collaborate with the DCA MSO in the development of a tactical MILSATCOM architecture. 15
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- b. Perform studies and engineering analyses to ensure interoperability of all MILSATCOM systems that have tactical applications. 17
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- c. Collaborate with MILSATCOM system managers in the engineering development and design of MILSATCOM terminals to ensure interoperability. 20
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- d. Review appropriate program documentation to ensure interoperability. 1
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- e. Review all SCOCs prepared by the MILSATCOM system managers to ensure that joint tactical interoperability requirements are satisfied. 3
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16. MILSATCOM System Architect. The NSO, as MILSATCOM System Architect, will: 6
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- a. Develop a recommended MILSATCOM system architecture for the MILSATCOM Panel in collaboration with the JTC3A and MILSATCOM system managers. The architecture must be responsive to the MILSATCOM requirements of the NCA, Joint Chiefs of Staff, and CINCs based on validated requirements, stated threats, and system constraints. 8
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- b. In collaboration with the Joint Chiefs of Staff and DOD components, develop overall MILSATCOM system goals and long-term system plans. 14
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- c. In collaboration and coordination with DOD components, develop system transition plans, as needed, to implement long-term system plans. 17
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- d. Continually analyze MILSATCOM system performance and use the results in the architectural planning process. 20
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- e. Assist the Joint Chiefs of Staff and JTC3A in analyzing requirements and interoperability needs, and recommend ways to satisfy requirements. 1
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- f. Establish and maintain a MILSATCOM URDB. 4
- g. In collaboration with the Joint Chiefs of Staff, executive agents, MILSATCOM system managers, and submitting organizations, assess technical feasibility of satisfying requirements by MILSATCOM. 5
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- h. Perform other studies and analyses and provide technical support to the Joint Chiefs of Staff, OSD, and the MILSATCOM Panel, as requested. 9
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SECTION IV. DETAILED POLICY AND PROCEDURES 12

17. Use and Location of MILSATCOM Systems 13

- a. The Joint Chiefs of Staff will validate: 14
 - (1) The location or relocation of all satellites in the respective MILSATCOM system constellations. 15
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 - (2) The space segment resources to be allocated to C3I requirements of designated users based on the validated concept of operations. 17
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19
 - (3) The use and location of DSCS earth terminals except for the following: 20
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 - (a) US Navy shipborne terminals. 22

(b) US Air Force airborne terminals.	<u>1</u>
(c) US Army, US Air Force, and US Marine Corps GMF terminals.	<u>2</u>
(d) Terminals applied to non-DOD users, e.g., DTS, UK, and NATO.	<u>3</u>
b. The use and location of all other terminals will be determined by the component concerned, consistent with JCS-approved OPLANS or planning documents.	<u>4</u>
18. <u>System Control and Operations Concept</u>	<u>5</u>
a. The SCOC provides an approved system baseline that defines the projected operational capability of the system. The MILSATCOM system manager will submit the SCOC for JCS validation following coordination with USCINCSpace, JTC3A, when applicable, and with concerned Services and Defense agencies no less than 2 years before the scheduled IOC. The SCOC will be updated and submitted to the Joint Chiefs of Staff as required.	<u>6</u>
b. The SCOC will contain, but not be limited to:	<u>7</u>
(1) An overall description of the system.	<u>8</u>
(2) An overall description of system operations and control, including interoperability and survivability.	<u>9</u>
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(3) Identification of system users and functions.	<u>1</u>
(4) Procedures to allocate system capacity.	<u>2</u>
(5) Procedures to implement approved restoration priorities (as appropriate).	<u>3</u>
(6) Procedures for reaction to a stressed environment.	<u>4</u>
(7) A user deployment concept (as appropriate).	<u>5</u>
19. <u>MILSATCOM System Selection Considerations</u>	<u>6</u>
a. Different satellite systems are designed to support different user requirements, as specified below:	<u>7</u>
(1) <u>MILSTAR (EHF)</u> . Minimum essential survivable, antijam strategic and tactical communications for fixed and mobile users; low throughput (maximum 2.4 kbps per channel).	<u>8</u>
(2) <u>DSCS (SHF)</u> . DCS, antijam, and wideband communications for fixed and mobile users; survivable connectivity for selected users; variable throughput (low to high).	<u>9</u>
(3) <u>FLTSATCOM (UHF)</u> . Crisis and contingency operations supporting only highly mobile tactical users; not jam resistant; narrowband; low throughput (16 kbps maximum, 2.4 kbps nominal, per access).	<u>10</u>
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(4) <u>AFSATCOM (UHF)</u> . Strategic and tactical operations	<u>1</u>
supporting only highly mobile strategic and tactical	<u>2</u>
users; narrowband; low throughput (objective of 2.4 kbps	<u>3</u>
maximum).	<u>4</u>
(5) <u>SLC</u> . Strategic and tactical submarine communica-	<u>5</u>
tions at operational depth and speed; average data rate	<u>6</u>
and time of delivery depends upon environmental	<u>7</u>
conditions, depth of submarine, and ocean area serviced.	<u>8</u>
b. Specific system-unique considerations and prioritiza-	<u>9</u>
tion procedures are in Volume II.	<u>10</u>
20. <u>Validation of User Requirements</u> . The following procedures	<u>11</u>
will normally be used for validating MILSATCOM user requests	<u>12</u>
(see Figure 1). Specific procedures for each system are in	<u>13</u>
Volume II.	<u>14</u>
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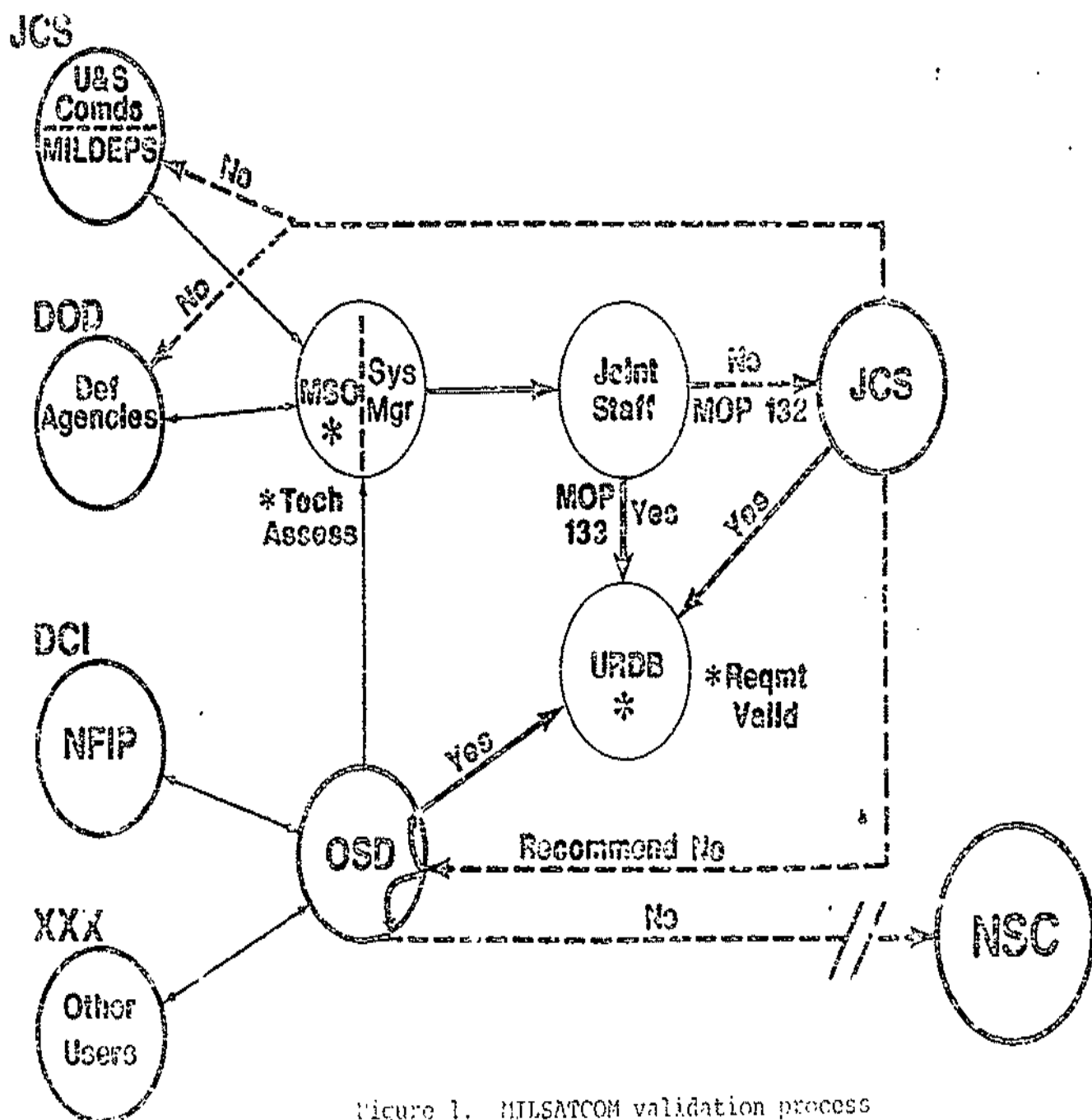


Figure 1. MILSATCOM validation process

a. <u>Submission and Processing of Requests</u>	<u>1</u>
(1) User requirement for MILSATCOM service will be	<u>2</u>
submitted to the MSO by the unified and specified	<u>3</u>
commands, Services, OSD, and Defense agencies. The MSO	<u>4</u>
will forward requirements to the appropriate MILSATCOM	<u>5</u>
system manager, who will analyze them for technical	<u>6</u>
feasibility and operational impact. MILSATCOM system	<u>7</u>
manager recommendations, coupled with the user	<u>8</u>
requirement requests, will be submitted annually by the	<u>9</u>
MSO, through the Joint Staff, to the Joint Chiefs of	<u>10</u>
Staff for validation. The Joint Staff will initiate	<u>11</u>
joint actions to validate requirements. Validated	<u>12</u>
requirements will be entered in the URDB.	<u>13</u>
(2) Non-DOD requests for MILSATCOM service will be	<u>14</u>
submitted to the ASD(C3I), who will forward them to the	<u>15</u>
Joint Chiefs of Staff for review and entry into the	<u>16</u>
process discussed in subparagraph 20a(1) above. The	<u>17</u>
Joint Staff will then submit recommendations for	<u>18</u>
ASD(C3I) decision.	<u>19</u>
(3) User requirements that justify a need for a new	<u>20</u>
MILSATCOM system, network, or constellation, or for a	<u>21</u>
	<u>22</u>

change to a previously baselined system, must be
approved in accordance with the provisions of SM-7-82.

(4) Network managers for common user networks will
submit requests for MILSATCOM service through the Joint
Staff to the Joint Chiefs of Staff.

(5) Urgent requirements (out-of-cycle validation) must
be forwarded to C3S Contingency Support Division, OJCS,
with information copies to the MSO and the MILSATCOM
system manager.

b. Justification. Requests submitted must include a
complete justification statement. The use of MILSATCOM
systems is based on the validated operational need and on
current operational considerations indicating that a
MILSATCOM system, rather than an alternative transmission
medium, should be used to satisfy the requirement. The
justification statement should specify which CONPLAN or
OPLAN the circuit supports.

c. Format. Requirements must be submitted on DCA Form 772
and in accordance with the instructions in DCA MSO Code
A800.

21. Guidelines for Prioritization and Allocation of MILSATCOM
System Capacity

a. MILSATCOM systems support the critical C3I requirements of the NCA, Joint Chiefs of Staff, CINCs, Chiefs of the Services, and Directors of Defense agencies. The MILSATCOM system manager will allocate the capacity of MILSATCOM systems based on priority of need and the current operational situation.

b. The priority assigned to a requirement will be based on:

(1) Importance to national security of the information to be transmitted.

(2) Time sensitivity of the information to be transmitted.

(3) Availability of alternate means of communication.

(4) Impact on other users.

(5) Technical and operational employment considerations, including satellite loading and survivability.

c. Procedures and guidelines for prioritization are in Appendix B.

APPENDIX A	<u>1</u>
REFERENCES	<u>2</u>
1. DOD Directive 4630.5, 9 October 1985, "Compatibility and Interoperability of Tactical Command, Control, Communications, and Intelligence Systems"	<u>3</u>
2. DOD Directive 5105.19, 10 August 1978, "Defense Communications Agency (DCA)"	<u>4</u>
3. DOD Directive 5105.44, 9 October 1973, "Military Satellite Communications (MILSATCOM) System Organization"	<u>5</u>
4. DOD Directive 5124.28, 5 July 1974, "Joint Tactical Command, Control, and Communications Agency (JTC3A)"	<u>6</u>
5. JCS MOP 112, 6 December 1985, "Military Telecommunications Agreements Between the United States and Regional Defense Organizations of Friendly Foreign Nations"	<u>7</u>
6. JCS MOP 160, 7 January 1986, "Compatibility and Interoperability of Tactical Command, Control, Communications, and Intelligence Systems"	<u>8</u>
7. JCS MOP 167, 21 September 1982, "JCS Controlled Mobile/Transportable Communications Assets"	<u>9</u>
8. JCS Pub 1, 1 January 1986, "Department of Defense Dictionary of Military and Associated Terms"	<u>10</u>
	<u>11</u>
	<u>12</u>
	<u>13</u>
	<u>14</u>
	<u>15</u>
	<u>16</u>
	<u>17</u>
	<u>18</u>
	<u>19</u>
	<u>20</u>
	<u>21</u>
	<u>22</u>

9. DCA MSO Code A800, June 1985, "MILSATCOM User Requirements System, User Requirements Data Base, User's Manual"	<u>1</u>
	<u>2</u>
10. JCSM-74-85, 4 March 1985, "Charter for the Joint Communications Satellite Center"	<u>3</u>
	<u>4</u>
11. SM-7-82, 11 January 1982, "Policy and Procedures for Management of Joint Command and Control Systems"	<u>5</u>
	<u>6</u>
12. SM-94-85, 12 February 1985, "USCINCSpace Mission Responsibilities (U)"	<u>7</u>
	<u>8</u>
13. SM-700-85, 15 October 1985, "USCINCSpace Space Forces (U)"	<u>9</u>
	<u>10</u>
14. SM-272-81, 24 April 1981, "Emergency Action Procedures of the Joint Chiefs of Staff, Volume I--General"	<u>11</u>
	<u>12</u>
15. SM-416-84, 9 July 1984, "The Use of Space Systems in Threat Environments"	<u>13</u>
	<u>14</u>
16. MJCS-110-82, 29 June 1982, "Joint Operational Requirement for Survivable and Endurant Strategic Communications"	<u>15</u>
	<u>16</u>
	<u>17</u>
	<u>18</u>
	<u>19</u>
	<u>20</u>
	<u>21</u>
	<u>22</u>

APPENDIX B

MILSATCOM PRIORITIZATION

1. A quantitative decision process will be used to evaluate the importance of MILSATCOM requirements and assist MILSATCOM system managers and the JCSC in the allocation of MILSATCOM capacity. Individual requirements will be assigned a priority between 0 (lowest) and 100 (highest) for each level of conflict. The priority will be calculated by adding the values assigned for each of the categories identified below. Tables 1a through 1e below are representative of a prioritization scheme developed by the J-3 that can be used by the MILSATCOM system managers. Actual prioritization matrices and values will vary with the different systems and will be included in the appropriate classified system appendix of JCS MOP 178, Volume II.

2. Priority Categories and Values

a. User. Values of 0-30 based on identity of the user supported by the requirement.

b. Information Content. Values of 0-30 based on the importance to national security of the information to be transmitted.

c. <u>Time Sensitivity</u> . Values of 0-15 based on the timeliness required for transmission of the information.	<u>1</u>
	<u>2</u>
d. <u>Alternate Means</u> . Values of 0-15 based on availability of alternative means for transmitting the information.	<u>3</u>
	<u>4</u>
e. <u>Impact</u> . Values of 0-10 based on the effect satisfaction of the requirement would have on other users of the system.	<u>5</u>
	<u>6</u>
	<u>7</u>
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Table 1a
User

	LEVEL OF CONFLICT						
	1	2	3	4	5	6	7
<u>USER</u>							

Table 1b
Information Content

	LEVEL OF CONFLICT						
	1	2	3	4	5	6	7
<u>INFO CONTENT</u>							

Table 1c
Time Sensitivity

TIME SENSITIVITY	LEVELS OF CONFLICT						
	1	2	3	4	5	6	7
ROUTINE	1	1	0	0	0	0	0
PRIORITY	2	1	1	1	0	0	2
IMMEDIATE	3	2	2	2	3	1	3
FLASH	4	5	5	5	5	6	4
FLASH OVERRIDE	5	6	7	7	7	8	4

Table 1d
Alternative Means

ALT MEANS OR ROUTE	LEVELS OF CONFLICT						
	1	2	3	4	5	6	7
NONE	6	8	8	10	10	10	8
BEST	3	3	4	4	4	4	4
PRIME	2	2	3	1	1	1	3
ALT	1	2	0	0	0	0	2
ECONOMIC	3	2	0	0	0	0	0

Table 1e
Impact on Other Users

IMPACT	LEVELS OF CONFLICT						
	1	2	3	4	5	6	7
NONE	5	6	8	8	10	10	8
MINOR	3	3	2	2	0	0	2
MAJOR	2	1	0	0	0	0	0

APPENDIX C

GLOSSARY

PART I--ABBREVIATIONS

AFSATCOM	Air Force satellite communications
ASD(C3I)	Assistant Secretary of Defense (Command, Control, Communications and Intelligence)
AUTODIN	Automatic Digital Network
AUTOSEVOCOM	Automatic Secure Voice Communications
AUTOVON	Automatic Voice Network
bps	bits per second
C3	command, control, and communications
C3I	command, control, communications, and intelligence
CINCs	commanders of unified and specified commands
CONPLAN	concept plan
DCA	Defense Communications Agency
DDN	Defense Digital Network
DIA	Defense Intelligence Agency
DLA	Defense Logistics Agency
DMA	Defense Mapping Agency
DRA	Defense Nuclear Agency
DSCS	Defense Satellite Communications System
DSN	Defense Switched Network
DTS	Diplomatic Telecommunications Service
EHF	extremely high frequency

FEP	FLTSAT EHF package
FLTSAT	fleet satellite
FLTSATCOM	Fleet Satellite Communications System
GMF	ground mobile forces
IOC	initial operational capability
JCSC	Joint Communications Satellite Center
JTC3A	Joint Tactical Command, Control, and Communications Agency
kbps	kilobits per second
LEASAT	leased satellite
LES	Lincoln Laboratories Experimental Satellite
MCEB	Military Communications-Electronics Board
MILSATCOM	military satellite communications
MSA	MILSATCOM System Architect
MSO	MILSATCOM System Office
NATO	North Atlantic Treaty Organization
OJCS	Organization of the Joint Chiefs of Staff
OPLAN	operations plan
OSD	Office of the Secretary of Defense
POM	Program Objective Memorandum
SCOC	System Control and Operations Concept
SHF	super high frequency
SLC	satellite laser communications
TT&C	telemetry, tracking, and command
UHF	ultra high frequency
URDB	User Requirements Data Base

PART II--DEFINITIONS*

Ephemeris Generation. The generation of data provided by satellite position with respect to time.

High Priority. MILSATCOM access determined to be in the national interest by the MILSATCOM validation process described in paragraph 20 and Figure 1.

MILSATCOM Panel. User representatives responsible for directing and coordinating the development of a long-range MILSATCOM architecture.

MILSTAR. EHF satellite system to provide survivable communications to tactical and strategic users.

Network Control. Controlling the operating parameters of all earth terminals accessing the satellite; controlling the satellite antenna-farm configuration, the gain state of each transponder, and jammer characterization, locating, and nulling, if applicable.

Payload. All communication packages, antennas, and transponders on the spacecraft.

Satellite Control. Tracking, telemetry, and command of the satellite to maintain its orbital location, monitor its status, resolve anomalies, and maneuver the satellite in support of communications network operations or to protect it against attack.

* Unless identified as extracted from JCS Pub 1, terminology herein is not standardized within the Department of Defense and is applicable only in the context of this document.

8 September 1986

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DISTRIBUTION A

FIRST NOTE TO HOLDERS OF JCS MOP 178

On

REVISION OF JCS MOP 178,
MILITARY SATELLITE COMMUNICATIONS SYSTEMS

Holders are requested to substitute the attached revised page 4 and to add pages 31, 32, 33, 34, and 35.

Joint Secretariat